

ABSTRACT

Genes encoding novel proteins named AID (Activation-Induced cytidine Deaminase), having structural relationship to APOBEC-1, one of RNA editing enzymes, and having a cytidine deaminase activity similar to APOBEC-1, has been found by preparing cDNA libraries for mouse B cell clone CH12F3-2, which undergoes class switch recombination from IgM to IgA at an extremely high rate together with activation of cells by stimulation with cytokines, with and without stimulating with cytokine, and performing subtraction cloning using the libraries.